REMARKS/ARGUMENTS

The office action dated February 10, 2004, has been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of this application are respectfully requested.

Claims 1-51 remain in this application. Claims 1, 14, 24, 30, and 38 are currently amended.

Rejections Under 35 U.S.C. § 103

Claims 1-51 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mansfield *et al.* (U.S. Pat. No. 6,477,382) in view of Salkintzis et al. entitled, "An In-Band Power-Saving Protocol for Mobile Data Networks" (IEEE, September 1998). Applicant respectfully submits that Mansfield and Salkintzis, either alone or in combination, fail to establish prima facie obviousness of claims 1-51.

Claim 1 is directed to a time-slicing digital video broadcasting transmitter system comprising: a buffer that receives at least one of digital video content and digital audio content from an information service provider; an encapsulator that receives the buffered content from the buffer and that forms at least one packet header for a current packet of a current burst of packets, wherein the current packet contains a first portion of the buffered content, wherein the at least one packet header contains time-slice information that includes a time-slice parameter specifying a relationship between the current packet of the current burst of packets and a subsequent burst of packets that contains a second portion of the buffered content; and a digital video broadcast transmitter that transmits the current burst of packets and the subsequent burst of packets.

Mansfield discloses a system in which, before data messages are transmitted to a mobile unit, the mobile unit must respond to a paging message to let a transmitting base station know that the mobile unit is ready to receive data messages. Mansfield discloses a paging protocol in which a base station transmits a paging packet message over a paging broadcast channel, which is separate from the logical channel over which system data or content, such as cellular phone calls, is broadcast. (See Abstract; col. 1, line 66, through col. 2, line 12 "Initial communication between a user station and a base station can be established ... when the base station attempts to

complete a call to the user station (for example, where the user station is paged). In many conventional mobile communication systems, a dedicated control channel is used to assist mobile stations in establishing communication. According to this technique, the mobile station first communicates over the control channel when establishing communication. The base station then assigns to the mobile station a "permanent" communication channel for exchanging bearer traffic messages for the duration of the call"; and col. 2, lines 42-47 "If the handset receives a paging message ..., it ... responds to the paging message according to the system protocol in an attempt to receive the incoming call.").

The paging packet message contains a set of paging messages and a "next page pointer," which specifies, as a number of frames of transmitted packets, when the next set of paging packet messages will be transmitted. (See Abstract, and col. 12, line 9, through col. 14, line 30 "In the example shown in FIG. 9, a paging channel is defined on a fixed time slot 903, such as the fourth time slot 905 of downlink time frame 901. During the fourth time slot 905, the base station 804 transmits a paging packet message (such as paging packet message 601) to mobile end systems 805 within listening distance. ... The example of FIG. 9 also illustrates how the next page pointer (NPP) 603 of the paging packet message 601 is preferably employed. The next page pointer 603 points to (i.e., identifies) the next time frame 911 in which a paging message will be sent by the base station 804. Time frame 911 is thus n time frames after the first time frame 901, where n is the encoded value represented by the next page pointer 603.").

Like Mansfield, Salkintzis discloses a system in which, before data messages are transmitted to a mobile unit, the mobile unit must respond to a paging message to let the transmitting base station know that the mobile unit is ready to receive data messages. Salkintzis discloses that a base station performs continuous paging of mobile units until a mobile unit sends a short receiver-ready "acknowledgement" notification message. In this way, the base station transmitter learns of the mobile unit's availability to receive data messages. (See Salkintzis, p. 1196-97). After receiving such a receiver-ready "acknowledgement" message, the base station sends one or more data messages to the mobile unit.

In response to the paragraph spanning pages 2 and 3 of the Office Action, Applicant respectfully points out that, while Mansfield and Salkintzis are directed to systems that send

paging messages in both directions between base stations and mobile units, the claimed invention is not directed to systems that require paging messaging. Therefore, whether or not paging messaging comprises a payload with message data is not what the applicant intended to argue in the Amendment filed December 10, 2003.

On page 3, the Office Action states that "Mansfield further teaches the time-slice information specifies an amount of time that elapses between transmissions of the current packet and transmission of a first transmission packet of the subsequent burst of packets (e.g., se col. 10, lines 24-36)." Applicant respectfully disagrees with this characterization of the cited portion of Mansfield, which discloses specifying a number of transmission-frame intervals between transmission of a current paging message and transmission of a next paging message. Accordingly, in the context of messages containing digital video content and/or digital audio content, Mansfield does not disclose specifying time-slice information of the type discussed in the quotation above from the Office Action.

Accordingly, Mansfield and Salkintzis, either alone or in combination, fail to teach or suggest a time-slicing digital video broadcasting transmitter system in which an encapsulator forms at least one packet header for a current packet of a current burst of packets, wherein the current packet contains a first portion of the buffered (digital video and/or digital audio) content, wherein the at least one packet header contains time-slice information that includes a time-slice parameter specifying a relationship between the current packet of the current burst of packets and a subsequent burst of packets that contains a second portion of the buffered content. In sharp contrast, Mansfield and Salkintzis disclose systems in which paging-message acknowledgements must be sent from a mobile unit to a transmitting base station before data messages will be sent from the base station to the mobile unit. Accordingly, Mansfield and Salkintzis, either alone or in combination, do not teach or suggest transmission of a packet containing buffered content and time-slice information, as recited in claim 1.

Further, Mansfield and Salkintzis, either alone or in combination, do not teach or suggest transmitting time-slice information that specifies, in a way that is independent of a number of data packet-transmission intervals, an amount of time that elapses between transmission of a current packet and transmission of a first-transmitted packet of a subsequent burst of packets, as

recited in claim 2. Instead, as discussed above, Mansfield's disclosure is directed to specifying, in terms of a number of transmission-packet intervals, when a next paging message will be sent. And Salkintzis does not transmit time-slice information that specifies an amount of time that elapses between transmission of a current packet and transmission of a first-transmitted packet of a subsequent burst of packets. Therefore, Salkintzis also does not transmit time-slice information that specifies such an amount of time in a way that is independent of a number of data packet-transmission intervals.

Mansfield and Salkintzis, either alone or in combination, do not teach or suggest placing the time-slice information into lower layer protocol packet header bits, as recited in claim 9. And Salkintzis does not teach or suggest sending time-slice information. Therefore, Salkintzis does not teach or suggest placing time-slice information into lower layer protocol packet header bits.

For at least the foregoing reasons, applicant respectfully submits that Mansfield and Salkintzis, either alone or in combination, fail to establish prima facie obviousness of claims 1, 2, and 9. Claims 14, 24, 30, and 38; 20 and 39; and 21, 27, 35, and 40 contain analogous limitations and are, therefore, also allowable for at least reasons similar to those discussed above in connection with claims 1, 2, and 9. The remaining claims are proper dependent claims and, therefore, are also allowable for at least similar reasons.

CONCLUSION

It is believed that no fee is required for this submission. If any fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733, accordingly.

All rejections having been addressed, applicant respectfully submits that this application is in condition for allowance, and respectfully requests reconsideration of the application and prompt issuance of a Notice of Allowance.

Respectfully submitted,

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